

**Mesotrione**

• Registrations achieved for 2001 sales  
Germany, Austria, Switzerland YF 11545

• Registrations possible for 2001 sales  
USA WF 2735

➡ Release for first sales

## **Conclusions of the Development Committee**

**Decision: Recommended for release to first sales**

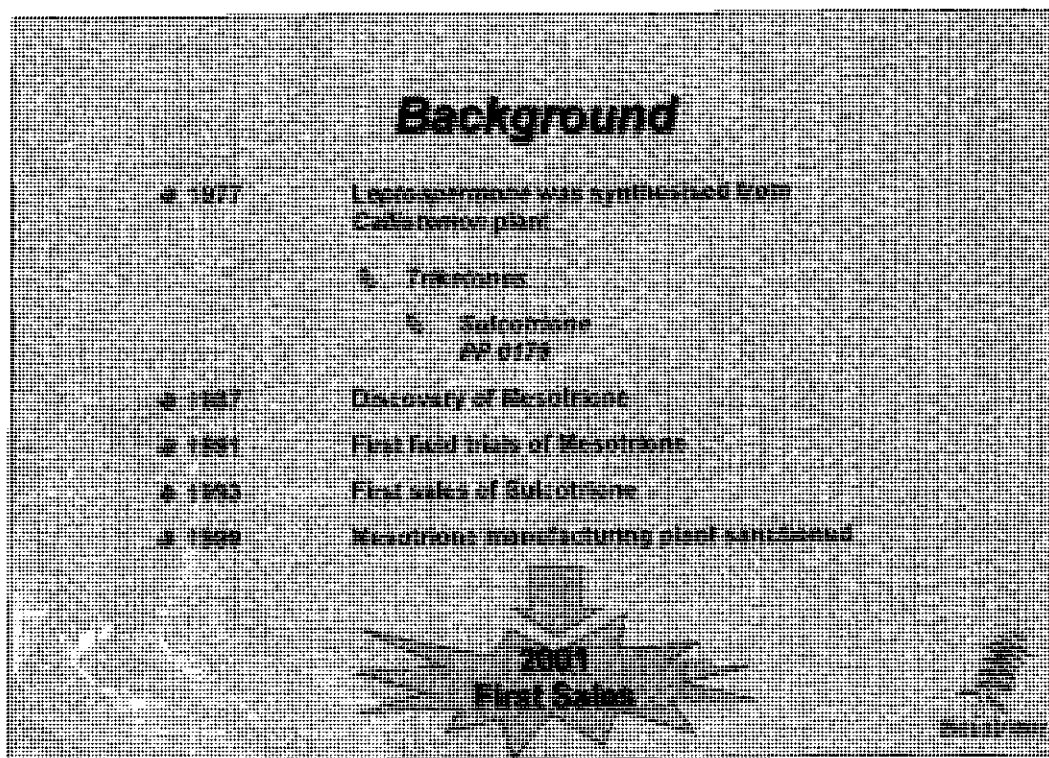
**Comments / Conditions:**

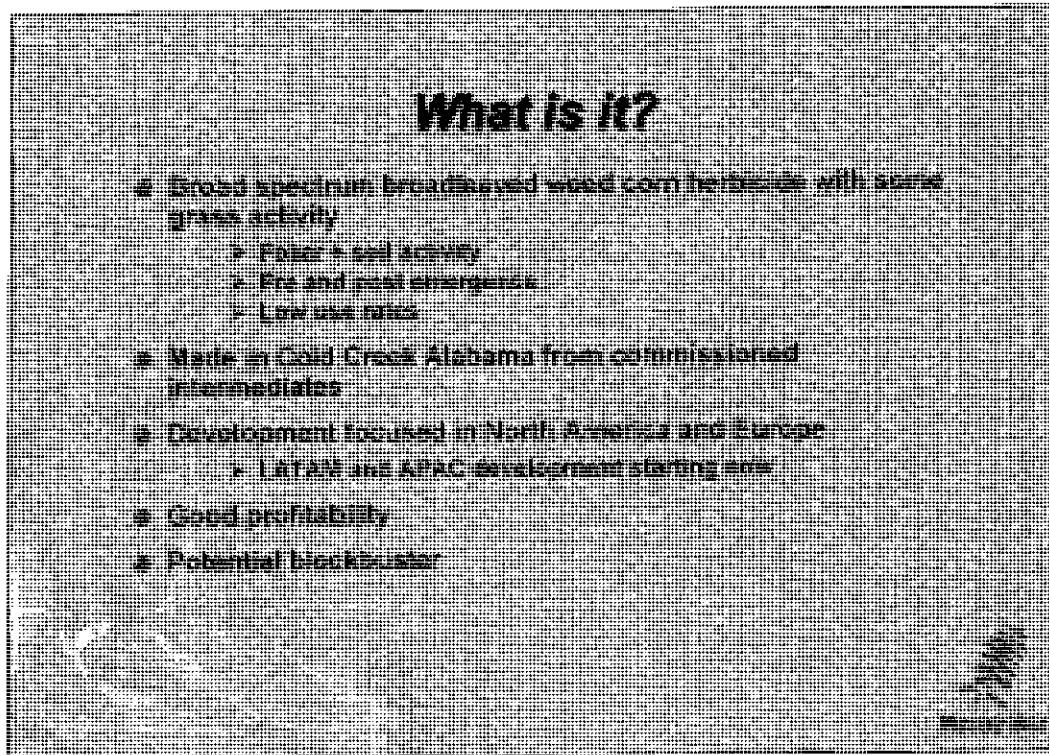
- Review patent strategy
  - Underway
- Confirm risk for carry-over is acceptable
  - Data review and trials underway
- All sales AI batches to be Ames negative
  - Testing in operation
- Update DeCo on production when new plant is active
  - Presentation to next DeCo.



## **Presentation today**

- |                              |              |
|------------------------------|--------------|
| • <b>Background</b>          | <b>Judy</b>  |
| • <b>Technical overview</b>  | <b>Derek</b> |
| • <b>Market overview</b>     | <b>Judy</b>  |
| • <b>Mesotrione strategy</b> | <b>Judy</b>  |
| • <b>How Mesotrione fits</b> | <b>Judy</b>  |

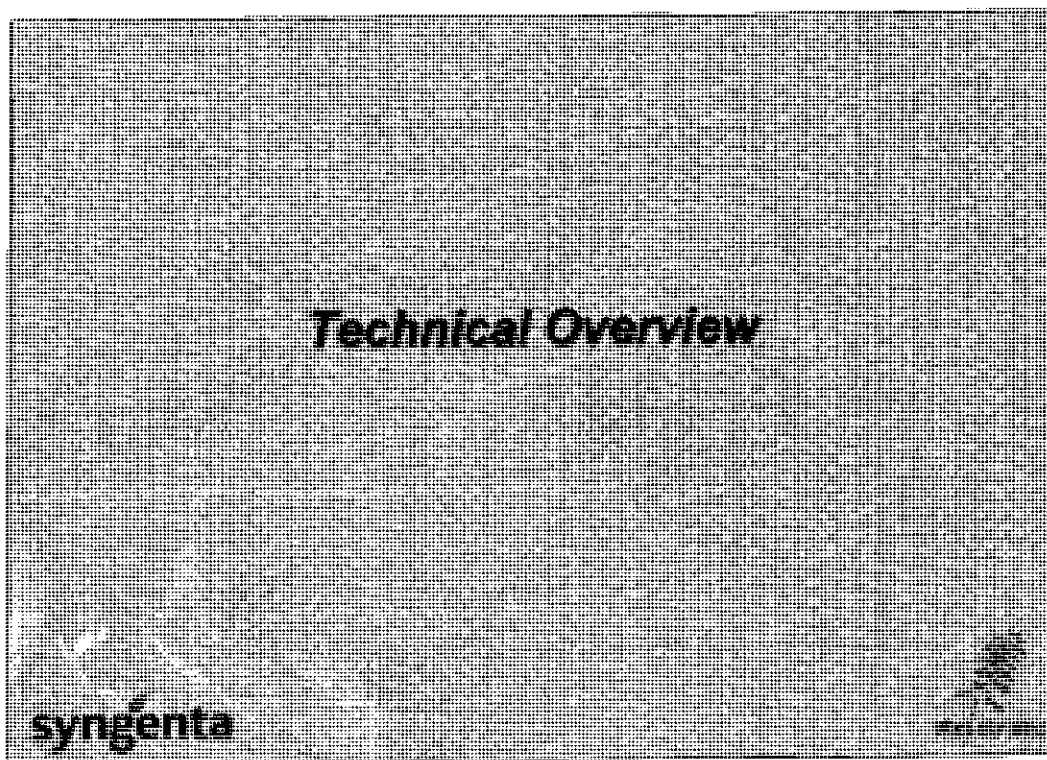




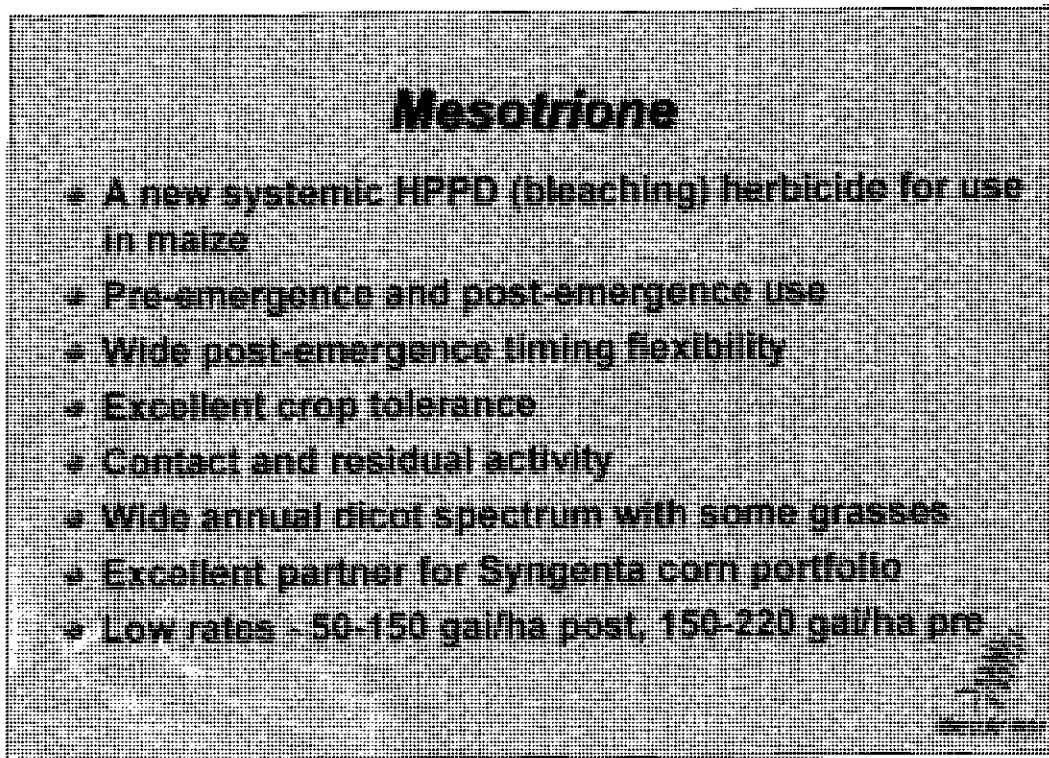


## Products

BRAND	Position	Rate gacha	Price/ha	Cost/ha	Gross Profit
GALLISTO (WF 2795)	Post	100	\$18	\$4	75%
GALLISTO (YF11645)	Post	100	\$30	\$5	73%
Pre-mixes with G-Moc	Pre	150-200	\$50 (\$35-\$50)	\$20	50%





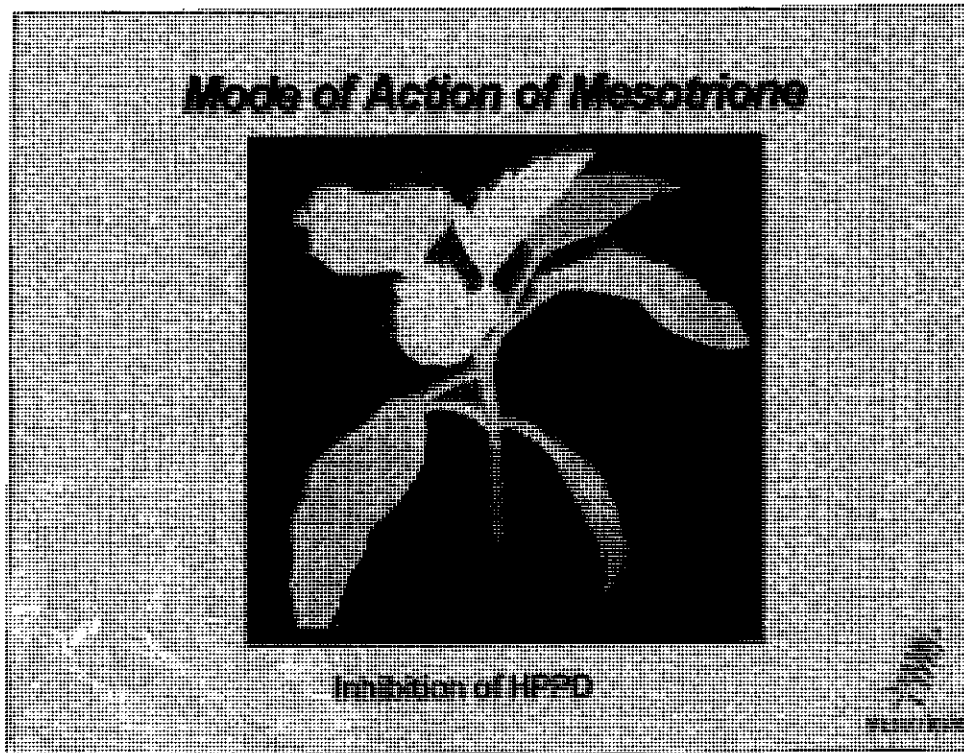


Now I'd like to just summarize some of the highlights of ZA1296.

It is a systemic, pre and post herbicide for controlling broadleaf weeds in corn.

Susceptible weeds stop growing soon after they absorb ZA1296, and die within 2 weeks.

This herbicide is rapidly absorbed and translocated. It is rainfast within 1 hour of a post application.



[illegible]

Chart can be found in C:/Windows/Temp/ZA1296 Reference Document.

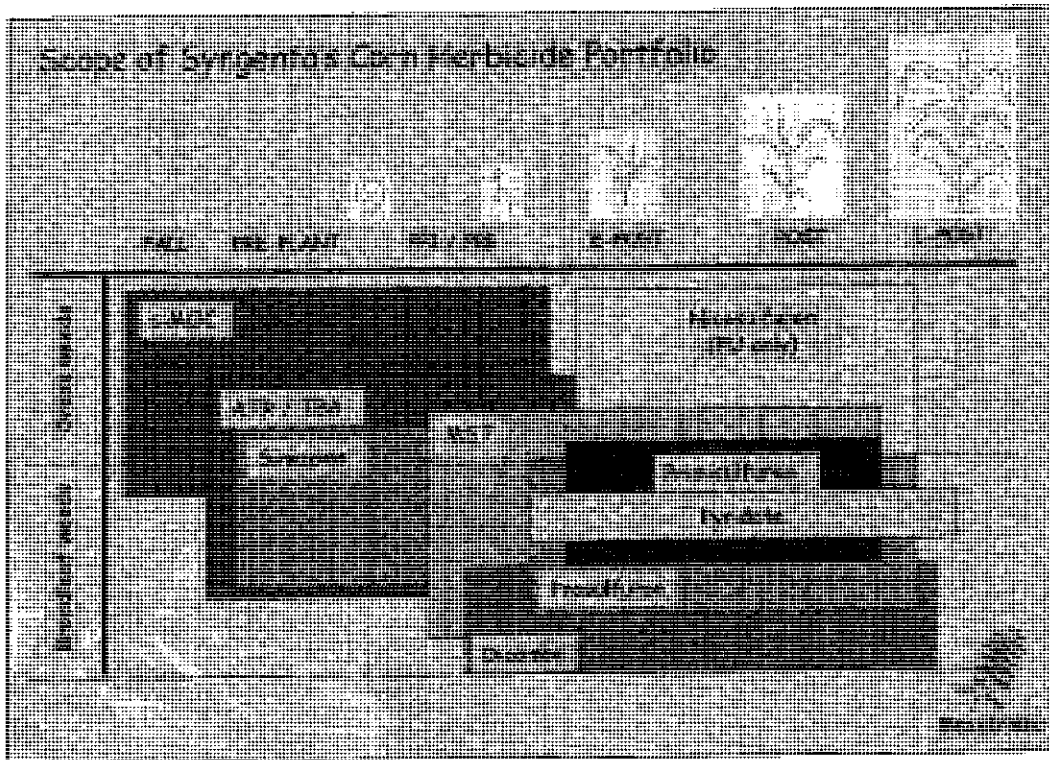


## **Key Features and Benefits of Mesotrione**

- **Control of key broadleaved weeds including Abutilon**
  - Complementary to atrazine
  - Allows atrazine free option
- **Wide pre to post-emergence application window**
  - Flexibility for the farmer
  - Fits all market segments
- **Contact and Residual activity**
  - Excellent mixture partner for 2,4-dichlorophenoxyacetic acid andnicosulfuron
- **Excellent crop tolerance**
  - Farmers do not want to see crop injury
- **No resistance to HPPD mode of action**
  - Controls ALS and inactive resistant weeds
- **Synergy with atrazine**
  - Allows significant atrazine rate reduction

## Competitor Comparison

	Manufactured	Pre-World War II	Domestic Use	Exported	Domestic Use	Exported
Aluminum						
Asphalt						
Barium						
Beryllium						
Bismuth						
Boron						
Bromine						
Calcium						
Carbon						
Chromium						
Cobalt						
Copper						
Fluorine						
Gold						
Iron						
Lead						
Lithium						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Silver						
Sulfur						
Tin						
Tungsten						
Vanadium						
Zinc						







## **Mesotrione – Technical Issues**

### **• Competition with Mikado in Europe**

- Some use fluroxypyr, Amaranthus, Inazone synergy; Some use glufosinate

### **• Carry-over potential**

- Label restrictions in place
- More trials underway to confirm the picture

### **• Patent conflicts**

- Canada freedom to operate OK
- Various (land) matters need follow-up

### **• Stability of new formulations containing S-MOC**

- Looks good at present

### **• Portfolio fit of Syngenta Broadleaved herbicides**

- Syngenta Matrix strategic plan in preparation (per. HTC)

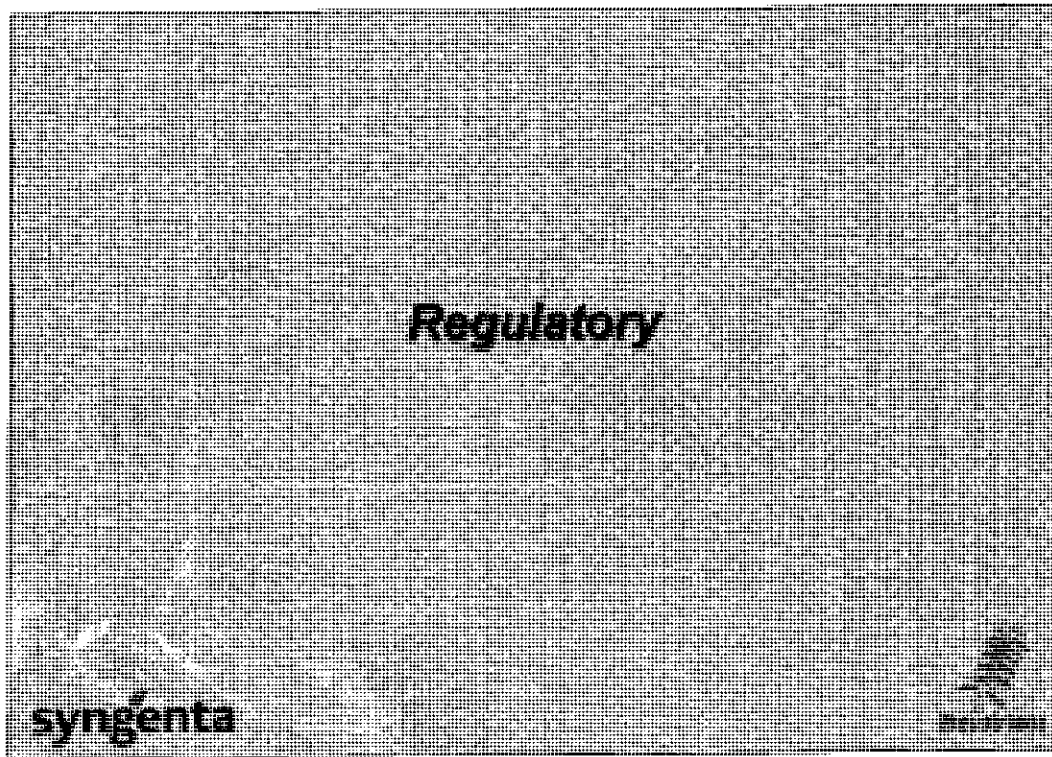
### **• Cross-contamination in formulation plants**

- Lowest contamination level set – formulation locations being decided

## **Mesotrione – Technical Fit**

- Allows rejuvenation of the Syngenta maize portfolio
- One pass season-long post-em broadspectrum weed control in mixture with nicosulfuron
- Synergistic in mixture with triazines
- One pass season-long pre-em broadspectrum weed control in mixture with S-MOC +/- triazines
- Some overlap with other Syngenta broadleaved herbicides





## **Toxicology / Environment**

- **Excellent toxicology profile**
- **Key issue - Rat very sensitive to MST induced tyrosinaemia**
  - Rat not appropriate species for human risk & hazard assessment
- **Seeking regulation on the mouse**
  - EPA, EU ISPRA, EU Rapporteur - recommend mouse
  - German, Austrian and French regulating on rat but will amend subject to Annex I listing conditions
- **Good Ecotoxicology / Environmental profile**
  - Minor issues being managed

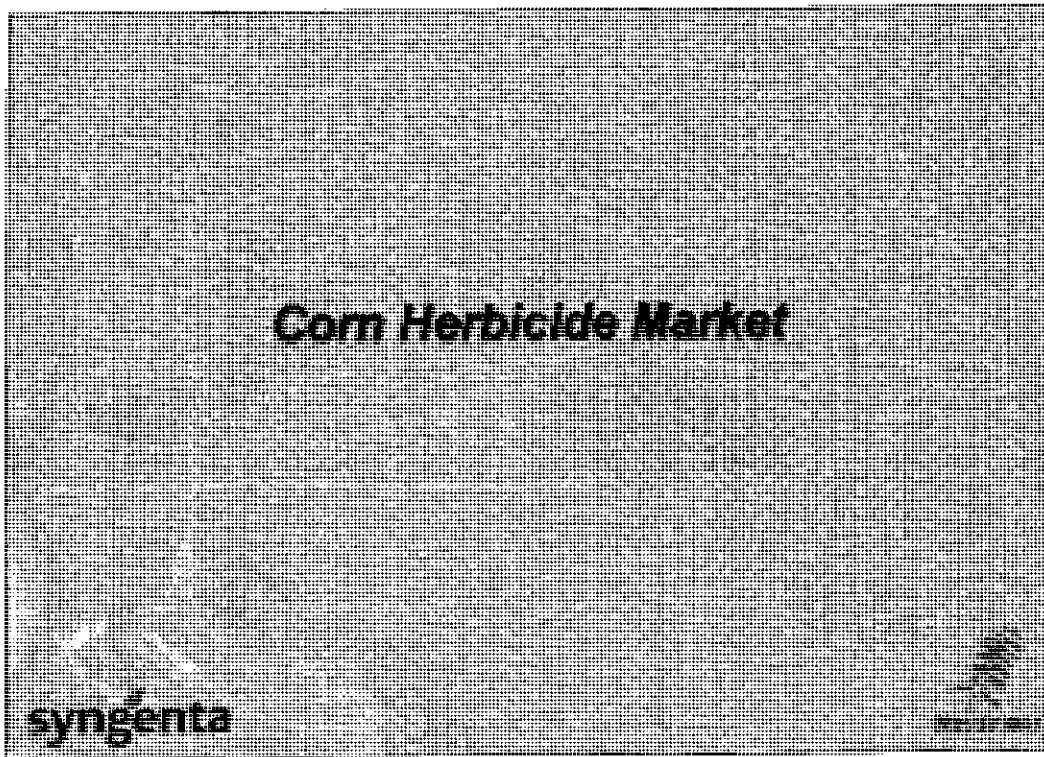
## **Manufacturing Regulatory**

- Ames +ve results for some technical material
  - All AI batches for sales must be Ames negative
  - All batches being tested
  - Review after main plant is producing
- AI used in tox. studies more pure than technical material
  - Support position that 92% is acceptable
  - Review policy when new plant on stream
- Formulation
  - Acceptance of minor changes



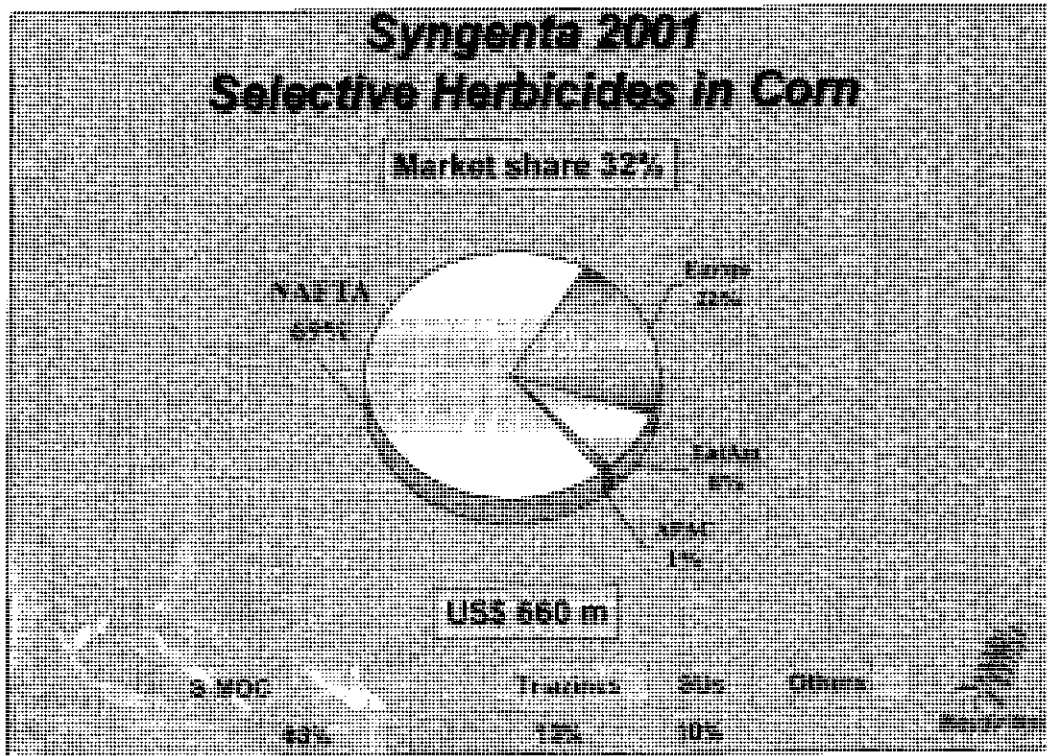
## **Regulatory Summary**

- All current issues manageable
- Any risk is on timeline rather than registrability

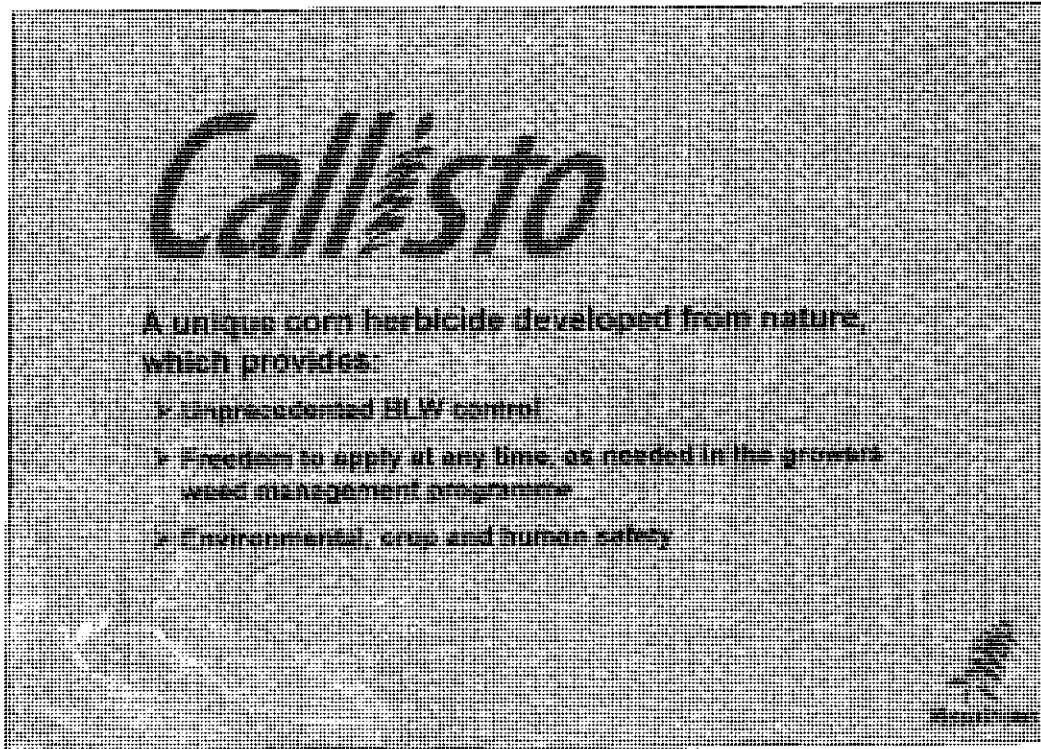




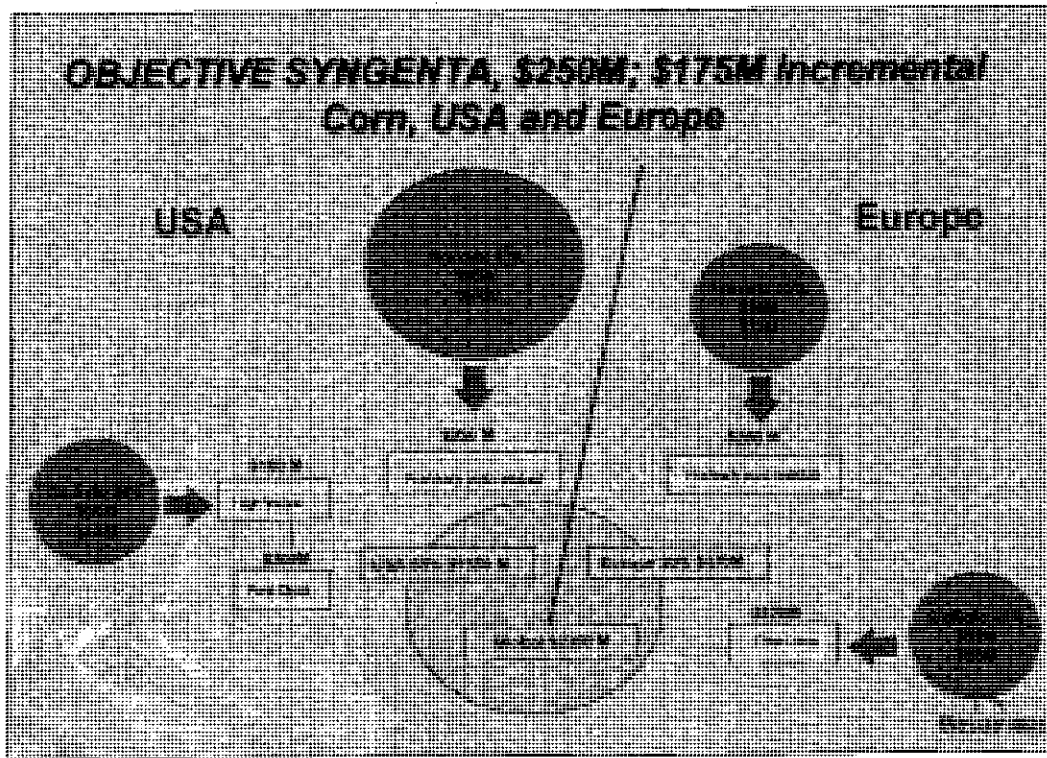












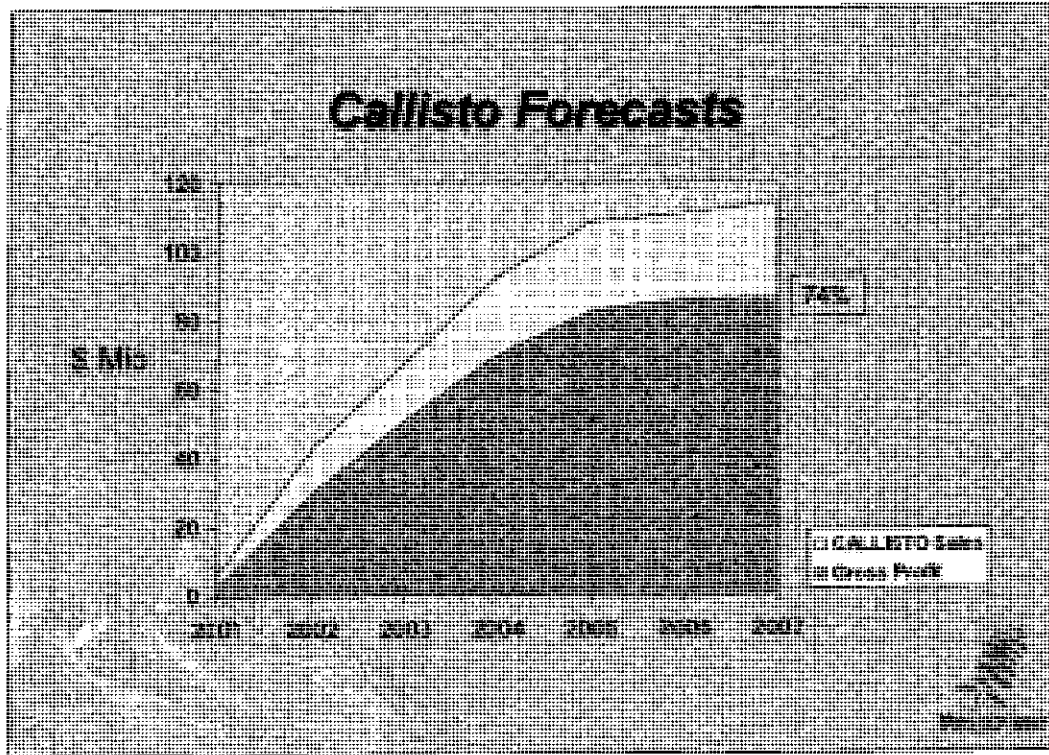
## Callisto Strategy

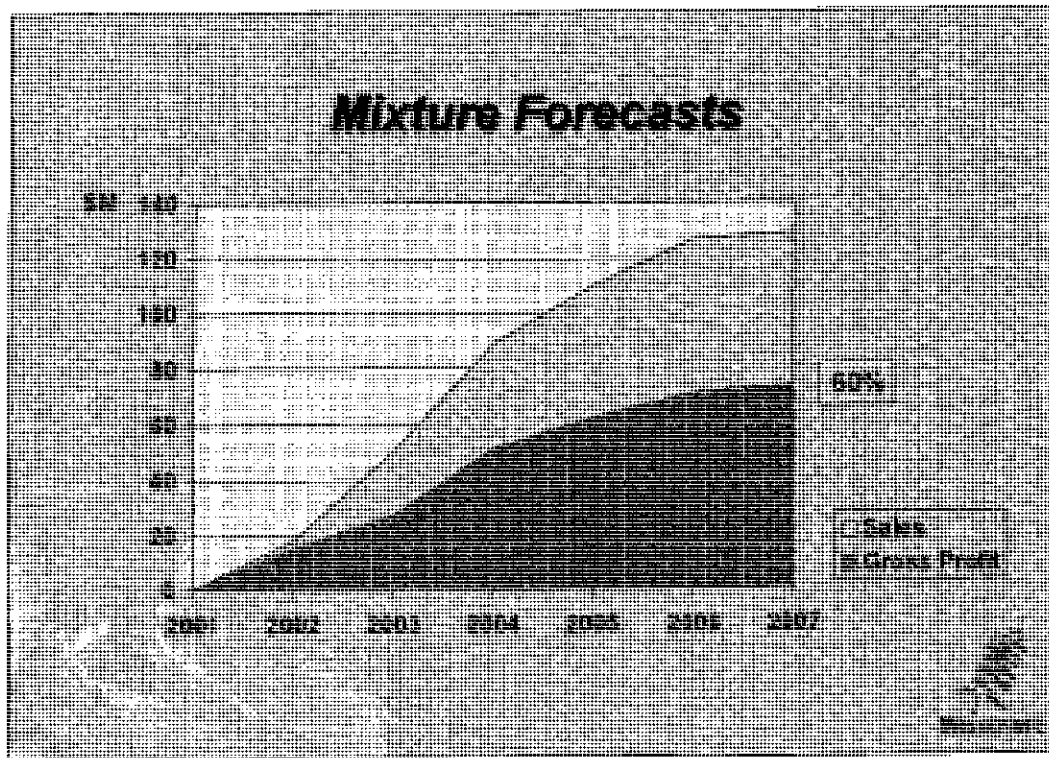
### Objectives

- To achieve 35% share of the post-emergence target segment by 2015, realising sales of \$120M, with gross margin of \$100M
- To develop a strategy for the post-emergence sector using Syngenta as partners, targeting for first commercialisation in 2009, and building to sales of \$130M by 2017
- Use resources to help build the strongest corn crop package in the USA and European markets and to rationalise Syngenta portfolio

LAUNCH PLAN			
2001	4SC	BIN	Pre-Mixes
	USA	GERMANY	
		SWITZERLAND	
		KENYA	
		NETHERLAND	
2002	HUNGARY	FRANCE	
	SOUTH AFRICA	BELGIUM	
	TURKEY	PORTUGAL	
	BALKANS	CZECH	
		SPAIN	
		ITALY	
2003	POLAND		IRA
	CZECH REP		FRANCE
	SLOVAKIA		
2004	CC		GERMANY
	CANADA		Rest of Europe
	LATAM		LATAM
	APAC		APAC







## Total Mesotrione

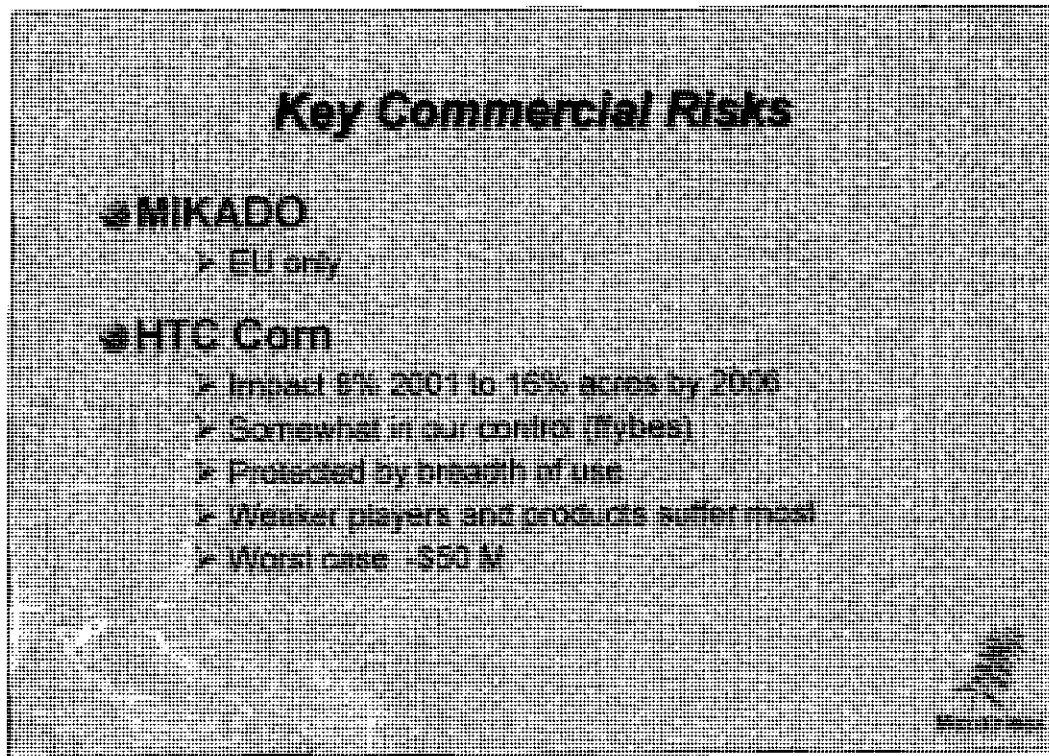
US \$ Million

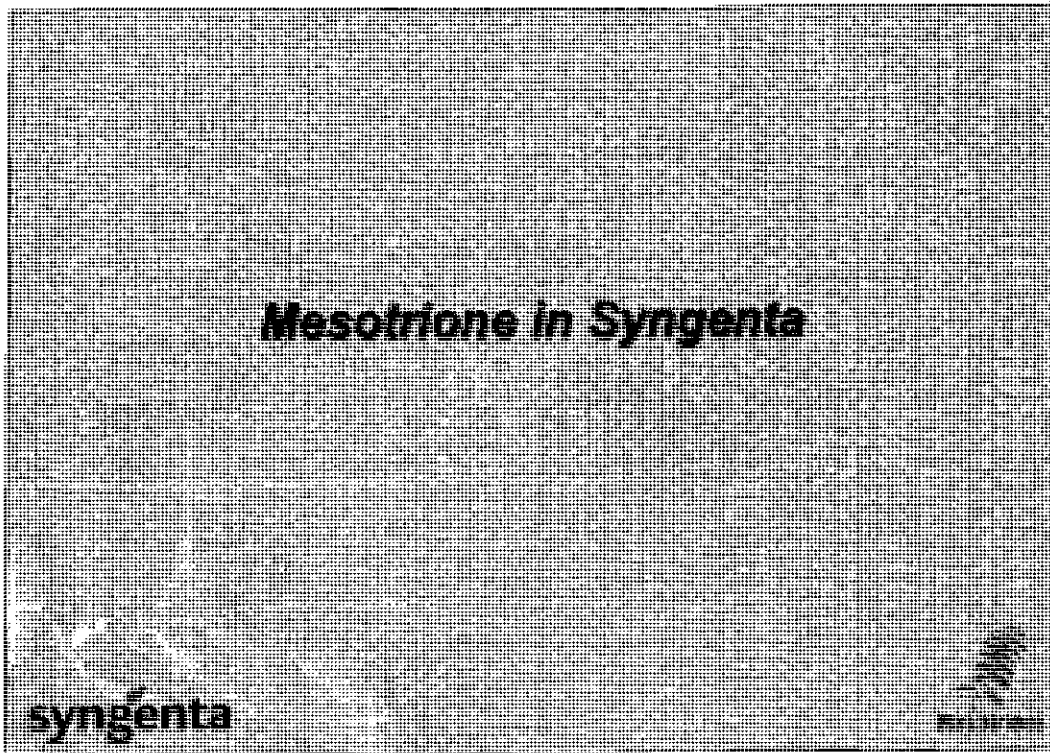
	2001	2002	2003	2004	2005	2006	2007
Sales	5	45	118	162	219	235	243
Gross Profit	3	31	78	121	145	157	160
Margin	54%	68%	66%	68%	66%	67%	66%
Business Contribution	0	11	56	97	123	137	141
Margin	-141%	24%	47%	54%	56%	58%	58%
EVA	10	1	25	50	65	73	75



## Mesotrione

Composition of NPV at 12 %		Discounted Payback	1.1 Yrs.
US\$ M		Discounted EVA	5253 M
EBITDA	539	IRR	11.7 %
NET INCOME	315		
After Tax Cash flow	169		
Terminal Value	345		
NPV at 12%	567		







## **Selective Corn Herbicide Objectives**

- Increase market share by 6% to 38% by 2008,  
realising sales of \$750m in corn
- Improve profitability of corn herbicide portfolio

## **Selective Corn Herbicides Strategy**

- Grow sales by the introduction of mesotrione
  - 2003-5: Post sector
  - 2003-8: Pre sector, in mixture with S-MOC
- Use the complimentary profile of mesotrione to rationalise and improve profitability of the Novartis portfolio
- Defend against generic acetanilides and triazines with strong branding and differentiated mixtures (with mesotrione)
- Preserve the regulatory position of the triazines by good stewardship, using mesotrione to help rate management
- Improve position in post-grass sector by discussions with third parties and/or in-house chemistry
- Use market leadership in corn and strong brands to minimise impact of HTC penetration, and to build attractive crop solutions



